

Fact Sheet

Making our Mill Environment - Friendly

Supports Principles 7, 8 and 9 of the UN Global Compact

APRIL pays serious attention to the protection of the environment in and around its pulp and paper complex in Riau, Sumatra, Indonesia. The company's industrial operations continue to bear no adverse impact particularly on the health of the surrounding communities.

The pulp mill uses best-available technology - extended Superbatch cooking, oxygen delignification and Elemental Chlorine Free (ECF) process to produce bleached hardwood kraft pulp in an environmentally responsible manner.

All emissions and effluents produced by the mill's operations are measured against external standards and monitored regularly by APRIL and various third parties, including relevant government agencies and NGOs.

Maintaining Standard Air Emissions and Ambient Air

Our mills are equipped with extensive air emission control systems that capture and prevent suspended particulates from entering the atmosphere. Malodorous gases are collected and incinerated in the recovery boiler.

APRIL has installed continuous emission monitoring (CEM) equipment at all critical emission points - at the power boiler, recovery boiler, dissolving tank, lime kiln, digester and the bleaching plant.

Our air emissions are audited by the Indonesian government, Sucofindo and the Indonesian Institute of Sciences (LIPI), using their own testing equipment and methods. Their independent verification provides an assurance that our mill is operating within acceptable limits of air emission.

Keeping Water Quality Safe

Wastewater is treated using the Ahlstrom USF Aquaflo process with bio-sludge treatment. This enables the mill to exceed the specifications of Indonesian regulations, the US Cluster Rule, the World Bank Pollution Prevention Guidelines and the European Commission's Best Available Technologies for the Pulp and Paper Industry.

We monitor daily the levels of BOD₅, COD, TSS, A_{OX} and pH in the effluent. Weekly we also monitor the total phosphorous and nitrogen discharge and compare with the standards of Nordic Swan. These procedures are included in our ISO 9001-2000 certified quality assurance system



and ISO 14001 certified environmental management system. In all aspects, we are within national, industry and international specifications.

We also work with third parties who undertake independent mill environment monitoring and community health survey. These include the University of Riau (UNRI), National University of Singapore (NUS) and Yayasan Riau Mandiri, a local NGO.

Managing our Mill Residues

We subscribe to cleaner production by applying the 5R - reduce, recover, reuse, recycle, replace approach.

With Balai Besar Pulp dan Kertas (Center for Pulp and Paper) and Balai Penelitian Tanah - Pusat Penelitian dan Pengembangan Tanah dan Agroklimat (Center for Soil and Agroclimate Research Agency) in Bogor, Indonesia, we are testing the use of sludge and boiler ash as compost material or soil ameliorant in our acacia plantations.

Key Facts

- Our power plant and pulp and paper mills are certified under ISO 9001 (quality management system), ISO 14001 (environmental management system), and OHSAS 18001 (occupational health and safety management system).
- Our paper products also bear Indonesian-certified ecolabel.
- We use an average of 350,000 cubic meters per day of fresh water from the Kampar River for our mill operations. This corresponds to 64 cubic meters per air-dry ton (Adt) of pulp, or 48 m³/Adt pulp of process water.
- Roughly 97% of total energy generated by the power plant comes from biofuels (black liquor, wood bark and rejected wood chips) which are bi-products of the production process.
- Our mills consume 80 to 95 kg of bleaching chemicals (O₂, ClO₂, H₂O₂, NaOH) per Adt pulp produced.
- We recovered and converted up to 97% of cooking chemicals yearly.
- Our total steam generation reaches 18 million tonnes per year.